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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,474	09/08/2003	Eugene T. Sanders	031264.083	2677

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EXAMINER	
MAYO III, WILLIAM H	

ART UNIT	PAPER NUMBER
2831	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/657,474	SANDERS, EUGENE T.	
	Examiner	Art Unit	
	William H. Mayo III	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 September 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *02/05/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for domestic priority under 35 U.S.C. 119(e). The provisional application being filed in Application No. 60/409,139, filed on September 9, 2002.

Information Disclosure Statement

2. The information disclosure statement filed February 5, 2004 has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered.

Drawings

3. The drawings are objected to because Figures 1a-1f lacks the proper cross-hatching which indicates the type of materials, which may be in an invention. Specifically, the cross hatching to indicate the conductive and reinforcing materials is improper. The applicant should refer to MPEP Section 608.02 for the proper cross-hatching of materials. Correction is required.

Claim Objections

4. Claims 15-17 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically, claims 15-17 fail to further limit the product claims 8 & 10, because the method of making the product doesn't add any additional structure because it has been held that the presence of process limitations in product claims, in which the product doesn't otherwise patentably distinguish over the prior art, cannot impart patentability to that product. Therefore, if the applicant intends to claim a process of making the electrical cable, he/she should rewrite the claim in independent form.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6-9, 11-12, and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Stamnitz (Pat Num 4,952,012). Stamnitz discloses an optical/electrical cable (Figs 1-3b) that provides protection for the optical/electrical core from abrasion at cable suspension points (abstract). Specifically, with respect to claim 1, Stamnitz discloses an electrical cable (Fig 3) comprising a reinforcing strands (i.e. core 15 & 20), conducting strands (41-46) surrounding the reinforcing strands (15 & 20) and located near the outer periphery thereof (Fig 3), and a holding member (17) containing an optic fiber (19) located in an interstice of the electrical cable (10", i.e. interstices of conducting

members 41-46). With respect to claim 2, Stamnitz discloses that the cable (10") has a strength member (60 & 70) adjacent the holding member (17, Fig 3). With respect to claim 2, Stamnitz discloses that the cable (10") has a strength member (60 & 70) that is attached to the holding member (17, Fig 3, via insulating layer 25b). With respect to claim 4, Stamnitz discloses that the strength member (60 & 70) is a electrically conductive member (Col 11, lines 15-20). With respect to claim 6, Stamnitz discloses that the diameter of the strength members (60 & 70) is greater than the diameter of the holding member (17, Fig 3). With respect to claim 7, Stamnitz discloses that the holding member (17) is a steel tube (Col 9, lines 14-15). With respect to claim 8, Stamnitz discloses that the electrical cable (10") comprises strands (41-46) forming a core (middle components surrounded by 25) and a holding member (17) containing an optic fiber (19), wherein the holding member (17) replaces at least one of the strands (41-46, Col 10, lines 39-43). With respect to claim 9, Stamnitz discloses that the strands (41-46) are comprised of conducting strands (Col 10, lines 39-43) near the outer periphery of the core (middle components surrounded by 25) and reinforcing strands (15) that are surrounded by the conducting strands (41-46). With respect to claim 11, Stamnitz discloses that the holding member (17) replaces at least one of the conducting strands (41-46). With respect to claim 12, Stamnitz discloses that a second holding member (18) replaces at least one of the conducting strands (41-46). With respect to claim 14, Stamnitz discloses an electrical cable (10") comprising a conductive core (middle components surrounded by 25), a means (17) for holding an optic fiber (19), and a means for strengthening the holding means (17), and a means (25) for strengthening

the holding means (17). With respect to claim 15, Stamnitz discloses a method of manufacturing the electrical cable (10") comprising feeding the core strands (41-46) into a strander device (not shown, wires 41-46 are helically wounded therefore had to have been stranded) and placing a holding member (25) on the core strands (41-46, Col 10, lines 53-57). With respect to claim 16, Stamnitz discloses that a method of manufacturing the electrical cable (10") comprising feeding the core strands (41-46) into a strander device (not shown, wires 41-46 are helically wounded therefore had to have been stranded) and placing a holding member (25) on the core strands (41-46, Col 10, lines 53-57), and covering the core strands (41-46) and the holding member (25) with additional strands (50). With respect to claim 17, Stamnitz discloses a method of manufacturing the electrical cable (10") comprising feeding a core strand (15) into the strander device having a flyer for applying additional strands (41-46) and a plantery flyer for a holding member (17), thereby matching the rotation of the flyer with the rotation of the plantery flyer (i.e. there method step has to be inherent given the conducting strands (41-46) and the holding member (17-19) are placed in equal form around the tube (20)), applying additional strands (50) and the holding member (25) to the core strands (41-46).

7. Claims 8-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith (EP Pat Num 2 240 638). With respect to claim 8, Smith discloses that the electrical cable (Fig 1) comprising strands (D) forming a core (middle components surrounded by E) and a holding member (G) containing an optic fiber (H), wherein the holding member (G) replaces at least one of the strands (D, Fig 1). With respect to

claim 9, Smith discloses that the strands (D) are comprised of conducting strands (Page 4, lines 4-5) near the outer periphery of the core (middle components surrounded by C) and reinforcing strands (A) that are surrounded by the conducting strands (D). With respect to claim 10, Stamnitz discloses that the holding member (G) replaces at least one of the conducting strands (D, Fig 1). With respect to claim 12, Stamnitz discloses that a second holding member (left G) replaces at least one of the conducting strands (left D).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stamnitz (Pat Num 4,952,012) in view of Engineering Design Guide, 3rd Edition by C& M Corporation (herein referred to as C & M). Stamnitz discloses an optical/electrical cable (Figs 1-3b) that provides protection for the optical/electrical core from abrasion at cable suspension points (abstract) as disclosed above with reference to claims 1 & 8.

However, Stamnitz doesn't necessarily disclose the electrical conductive material being made of copper (claim 5).

C & M teaches that copper is well known as a conductor material and is the most widely used conductor material because of its fine properties, durable physical

properties, low cost, flexibility, and because it can be easily formed and is commercially available in a wide range of sizes and shapes (see under the heading copper).

With respect to claim 5, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the strength member of Stamnitz to comprise the electrically conductive copper material as taught by C & M because C & M teaches that such a material is the most widely used conductor material because of its fine properties, durable physical properties, low cost, flexibility, and because it can be easily formed and is commercially available in a wide range of sizes and shapes (see under the heading copper) and since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Knudsen et al (Pat Num 6,510,103), Knudsen et al (Pat Num 6,333,898), Hunn (Pat Num 4,326,094), Ruffa (Pat Num 6,072,928), and Spicer (Pat Num 4,317,002), all of which disclose various electrical cables.

Communication

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (571)-

272-1978. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William H. Mayo III
Primary Examiner
Art Unit 2831

WHM III
September 24, 2004